

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

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PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of Mailing
(day/month/year)

19 NOV 1997

Applicant's or agent's file reference

423900.P2692

IMPORTANT NOTIFICATION

International application No.

PCT/US96/20573

International filing date (day/month/year)

17 DECEMBER 1996

Priority Date (day/month/year)

19 DECEMBER 1995

Applicant

INTEL CORPORATION

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

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NOV 24 1997

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN
LOS ANGELES

NO DOCKETING
REQUIRED

Name and mailing address of the IPEA/US

Commissioner of Patents and Trademarks
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PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference 423900.P2692 | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/US96/20573 | International filing date (day/month/year) 17 DECEMBER 1996 | Priority date (day/month/year) 19 DECEMBER 1995 |
| International Patent Classification (IPC) or national classification and IPC Please See Supplemental Sheet. | | |
| Applicant INTEL CORPORATION | | |

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| <p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>—</u> sheets.</p> <p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step or industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application |
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| Date of submission of the demand 01 JULY 1997 | Date of completion of this report 06 OCTOBER 1997 |
| Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 | Authorized officer WILLIAM TREAT <i>W. Treat</i> |
| Facsimile No. (703) 305-3230 | Telephone No. (703) 305-9699 |

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US96/20573

I. Basis of the report

1. This report has been drawn on the basis of (Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments):

☒ the international application as originally filed.

☒ the description, pages 1-130 , as originally filed.

pages NONE , filed with the demand.

pages NONE , filed with the letter of _____.

pages _____ , filed with the letter of _____.

☒ the claims, Nos. 1-35 , as originally filed.

Nos. NONE , as amended under Article 19.

Nos. NONE , filed with the demand.

Nos. NONE , filed with the letter of _____.

Nos. _____ , filed with the letter of _____.

☒ the drawings, sheets/fig 1-20 , as originally filed.

sheets/fig NONE , filed with the demand.

sheets/fig NONE , filed with the letter of _____.

sheets/fig _____ , filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

☒ the description, pages NONE .

☒ the claims, Nos. NONE .

☒ the drawings, sheets/fig NONE .

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the ~~Supplemental Box~~ Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US96/20573

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

| | | |
|-------------------------------|--------------------|-----|
| Novelty (N) | Claims <u>1-35</u> | YES |
| | Claims <u>NONE</u> | NO |
| Inventive Step (IS) | Claims <u>1-35</u> | YES |
| | Claims <u>NONE</u> | NO |
| Industrial Applicability (IA) | Claims <u>1-35</u> | YES |
| | Claims <u>NONE</u> | NO |

2. CITATIONS AND EXPLANATIONS

Claims 1-35 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest:

a single logical register file that is operated as a flat register file when executing a first instruction of a first instruction type and a operates as a stack register file when executing a first instruction of a second instruction type as claimed by independent claim 1;

executing a set of floating point instructions and a set of packed data instruction on a partially aliased single logical file as claimed by independent claim 17;

implementing partial context switching when executing scalar and packed data instruction as claimed by independent claims 21 and 32; and

writing a packed data item in mantissa field and writing a infinity in a sign and exponent field of a single logical register file as claimed by independent claim 35.

Dependent claims 2-16, 18-20, 22-31, and 33-34 meet the criteria set out in PCT Article 33 (2)-(3), because of dependency on independent claims 1, 17, 21, 32, and 35 respectively.

Upon reconsideration of claimed invention in light of the specification, Rosenthal fails to teach or suggest the inventive steps of claims 21-31. Rosenthal's invention is directed to a system for selecting devices in a multi-processing system and is not directed to the method steps recited in the claims 21-31, *supra*.

Upon reconsideration of claimed invention in light of the specification, Margulis fails to teach or suggest the inventive steps of claims 32-34. Margulis's invention is directed to a floating point unit of a i860 processor and is not directed to the method steps recited in the claims 32-34, *supra*.

The combination of Garg and Margulis does not teach or suggest the method steps recited in the claims 17-20 and 35.

Claims 1-35 have industrial applicability under PCT Article 33(4) because the subject matter claimed can be made or used in industry.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

CLASSIFICATION:

The International Patent Classification (IPC) and/or the National classification are as listed below:

IPC(6): G06F 9/34, 9/46, 9/00, 9/302 and US Cl.: 395/392, 395/393, 395/569, 395/570, 395/591, 395/678